



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF: Morris Samelson and Johnathan M. Scharff	ATTY DKT NO.: P-5435(DIV1)RCE
SERIAL NO.: 10/601,796	GROUP ART UNIT: 1615
FILED: June 23, 2003	EXAMINER: Lakshmi Sarada Channavajjala
TITLE: Ultra Fine Dead Sea Mineral Compound and Method of Manufacture	
TO: Commissioner of Patents P.O. Box 1450 Alexandria, VA 22313-1450	

DECLARATION UNDER 37 C.F.R. § 1.132

Dear Madam:

I, Morris Samelson, declare as follows:

1. I am one of the named inventors of the above referenced patent application.
2. Since March of 1996, I have been involved in the importation and distribution of Dead Sea minerals (salts) as well as the manufacturing of Dead Sea mineral consumer products.
3. The source of Dead Sea minerals is Dead Sea Works, Ltd. This company has the exclusive rights to mine the Dead Sea in Israel and serves its customers in over 60 countries.
4. The specification or Typical Composition (analysis) of unprocessed native Dead Sea salts that the Dead Sea Works, Ltd. can conform to is 31.0 – 35.0% magnesium chloride, 20.0 – 28.0% potassium chloride, 3-8.0% sodium chloride, 0.1-0.5% calcium chloride, 0.3-0.6% bromide, 0.05-0.2% sulfates, 0-0.3% insoluble minerals, and 32.0-40.0% water of crystallization. Dead Sea Works, Ltd. offers two standard grades (granularity sizes): a course grade and a fine grade. The screen analysis for the coarse grade contains 90% between 5 and 10 mesh and 90% between 1.7 and 4.0 mm. The screen analysis for the fine grade

Dead Sea minerals contains 90% less than 10 mesh and 90% less than 1.7 mm.

5. This information was made known to me through my business relationship with Dead Sea Works, Ltd. and is readily confirmed by visiting its website at www.dsw.co.il.
6. I had attempted to manufacture products utilizing the native minerals and realized that due to the varying particle sizes found in the fine grade native Dead Sea minerals, it was not possible to manufacture a desirable composition requiring no mixing prior to use that could be packaged in all types of packaging materials, even plastic tubes for convenience and maximum portability that would remain stable in suspension without rapidly settling out of the carrier medium. This was one of the advantages of the present invention.
7. I carried out an exhaustive search for a more desirable ultra-fine uniform raw material compound of Dead Sea minerals with no success. There was no such commercially available compound. Since Dead Sea Works, Ltd. was not able to provide me with Dead Sea minerals of the particular granularity in which I was interested, I endeavored to and successfully developed technology that effectively yielded such a product.
8. From extensive research it was ascertained that in fractionalizing highly ionic and hygroscopic Dead Sea minerals utilizing methods such as hammer milling, the amount of friction created in the process caused the temperature to increase significantly. This increase in temperature caused the minerals to degrade and bind into large clumps of rock soon after being processed. In order to keep such material from clumping and keep it free flowing, anti-caking ingredients needed to be added to the composition. This was unacceptable. These unnatural ingredients could cause serious health problems when contacted with human skin and are undesirable and unusable for cosmetic and skin care manufacturers, especially those seeking to manufacture all natural consumer products.
9. For this reason, I chose to utilize a conical screen mill modified to keep the amount of friction and temperature of the minerals below such critical levels. The present invention makes it possible to provide novel uniform ultra-fine granularities of Dead Sea minerals that are 100% less than 1.0 mm in granularity

size. This yields a commercially viable raw material ingredient that allows for the manufacturing of many Dead Sea products having a uniform ultra-fine granularity throughout the composition. This product can be added in significantly higher concentrations to form an esthetically acceptable cosmetic composition, giving a tremendous advantage over other products containing Dead Sea minerals of various larger and non-uniform granularity size ranges. This is a breakthrough that until the present invention was unheard of.

10. I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both, under Section 1001 of Title 18 of the United State Code, and that such willful false statements may jeopardize the validity of the above-referenced application or any patent issuing thereon.

01/16/07
Date

M. Samelson
Morris Samelson